PCT09

RAW SEQUENCE LISTING DATE: 12/21/2001 PATENT APPLICATION: US/09/980,464 TIME: 13:14:11

Input Set : A:\2923-US Seq Listing.txt
Output Set: N:\CRF3\12212001\I980464.raw

```
3 <110> APPLICANT: Immunex Corporation
              Bird, Timothy A.
                                                                    ENTERED
              Virca, G. Duke
      5
              Martin, Unja
              Anderson, Dirk M.
      9 <120> TITLE OF INVENTION: NOVEL MURINE AND HUMAN KINASES
     11 <130> FILE REFERENCE: 2923-US
C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/980,464
C--> 13 <141> CURRENT FILING DATE: 2001-11-27
     13 <160> NUMBER OF SEQ ID NOS: 36
     15 <170> SOFTWARE: PatentIn version 3.1
     17 <210> SEQ ID NO: 1
     18 <211> LENGTH: 896
     19 <212> TYPE: DNA
     20 <213> ORGANISM: Mus musculus
     22 <400> SEQUENCE: 1
                                                                               60
     23 ttggaacgag acgacctgct cggcggcagc ggagtgagcg agccggagcg tgagtggccc
                                                                              120
     25 egeggeggee atgggegace eageceeege eegeageetg gaegacateg acetgtetge
     27 cctgcgggac cctgcaggaa tctttgagct ggtggaggtg gttggcaatg gaacctatgg
                                                                              180
     29 acaggtatac aaggggcggc acgtcaagac tgggcagctg gctgccatta aggtcatgga
                                                                              240
                                                                              300
     31 tgtcacagag qatgaggagg aagagatcaa acaggaaatc aacatgttaa agaagtactc
     33 teaceatege aatattgeea cetactatgg ggeetttate aagaagagee eteetgggaa
                                                                              360
     35 cgatgaccag ctctggctgg tgatggagtt ctgcggtgct ggttcagtga ccgacctggt
                                                                              420
                                                                              480
     37 aaagaacaca aaagggaacg cactgaagga ggattgcatt gcttacatct gcagggagat
     39 teteaggggt ettgeceate tecatgecea caaggtgate cacagagata teaagggaca
                                                                              540
     41 aaatgtgctg ctgacagaga atgctgaagt caagctagtg gattttgggg tgagtgctca
                                                                              600
     43 gctggaccgc actgtgggca ggcggaacac tttcattgga accccatact ggatggctcc
                                                                              660
     45 agaagtcatt geetgtgaeg agaaceeega tgeeacetat gactacagga gtgacatttg
                                                                              720
     47 gtctctagga atcacagcca ttgaaatggc agagggagcc ccccctctgt gtgacatgca
                                                                              780
     49 coctatgogg geoctettee teateceteg gaacecteee eccaggetea agteaaagaa
                                                                              840
     51 atgqtctaag aagttcactg acttcatcga cacgtgtctc atcaagactt acctga
                                                                              896
     54 <210> SEQ ID NO: 2
     55 <211> LENGTH: 1060
     56 <212> TYPE: DNA
     57 <213> ORGANISM: Mus musculus
    59 <400> SEQUENCE: 2
     60 cggcgcctgc agtggcgcgg ggagaggcga tcggccccgg atcccgcagc cctgcagccc
                                                                               60
     62 gcgtagaccg agctgccccg gcgccccgaa tcctgaagtc ccagttgagt cagaatggat
                                                                              120
     64 gaacaatcac aaggaatgca agggccgccc gttactcagt tccagccaca gaaggcatta
                                                                              180
     66 cggccagata tgggctataa tactttagcc aacttccgaa tagaaaagaa aattggtcgt
                                                                              240
     68 ggacaattta gtgaagttta tagagcatcc tgtctcttgg atggagtgcc ggtagcgtta
                                                                              300
     70 aaaaaagtac agatatttga tttaatggat gccaaagcac gtgctgattg tatcaaagaa
                                                                              360
                                                                              420
     72 atagacetee ttaageaact caaceateea aatgtaatta aataetatge ateatteatt
     74 gaggataatg agctgaacat agttttggag ttagcagatg ctggtgacct ctccagaatg
                                                                              480
     76 ataaagcact ttaagaaaca aaagaggeta ateeetgaga gaacegtttg gaaataette
                                                                              540
     78 gttcagctct gcagtgcact ggaccacatg cattctcgaa gagtcatgca cagagatata
                                                                              600
     80 aaaccageta atgtgtteat tacagecaet ggggtagtaa aacteggaga eettgggett
                                                                              660
```



PATENT APPLICATION: US/09/980,464

DATE: 12/21/2001 TIME: 13:14:11

Input Set : A:\2923-US Seq Listing.txt
Output Set: N:\CRF3\12212001\I980464.raw

82 ggtcggtttt tcagctccaa aaccacagct gcacattctt tagtgggtac accttactac	720						
84 atgtctccag agagaataca tgaaaatgga tacaacttca agtctgacat ctggtctctt	780						
86 ggctgtctgc tatatgagat ggctgcactg cagagtcctt tctacggcga caagatgaac	840						
88 ttgtattete tgtgtaagaa gatagageag tgtgactaee egeeteteee gteagateae	900						
90 tattcggagg agctacgaca gctagttaat atatgcatca acccagatcc agagaagcga	960						
92 cccgacatcg cctatqttta tgatgtggca aagaggatgc atgcatgtac cgcaagcacc	1020						
94 taaactgtac aagateetga ageaggtegt etegtteeaa	1060						
97 <210> SEQ ID NO: 3							
98 <211> LENGTH: 1694							
99 <212> TYPE: DNA							
100 <213> ORGANISM: Mus musculus							
102 <400> SEQUENCE: 3							
103 tggaacgaga cgacctgctc cggagagcag tagaaattag agccagggag ggaccgcgg	60						
105 ggcagcagcc aaggcgaaag aggaaactgc cgaagaggaa gctctgcggc agcccgagcc							
107 tecetgeget cegeatecte cegetecgea teceggegee gggeatecee eggageeege	180						
109 geogegeete eggegeeet teeceagege aaccetegge egeeetacag cattagtete							
111 ccatggcccg ggagaacggc gagagcagct cctcctggaa aaagcaagca gaagacatta	a 3.00						
113 agaagatett egagtteaag gagaeeeteg gaaetgggge etttetgaa gttgttttag	g 360						
115 ccgaggagaa agctactggg aagctcttcg cagtgaagtg catcccgaag aaggcgctga	a 420						
117 agggcaagga gagcagcatc gagaacgaga ttgccgtgct tagaaagatt aagcatgaaa	480						
119 acattgttgc cttggaagat atttatgaaa gcccaaatca cctctacctg gtcatgcaac	540						
121 ttgtgtctgg tggagaactc ttcgatcgga tagtggagaa ggggttttac acagagaaag	, 600						
123 atgccagcac teteateege caggteetgg atgccgtata etateteeac agaatgggea	a 660						
125 ttgtccacag ggacctcaag ccggagaatc tcttatacta cagtcaagac gaggagtcca	1 720						
127 aaataatgat cagtgacttt ggcttgtcga aaatggaggg caaaggagat gtgatgtcca	a 780						
129 cggcctgcgg gaccccaggc tatgttgctc cggaagttct cgcccagaaa ccgtacagca	a 840						
131 aagctgtgga ctgctggtcc atcggggtga tcgcctatat cttgctctgt ggttaccctc	900						
133 ctttttatga tgaaaatgac tcgaagctgt ttgaacagat cctcaaggca gaatatgagt	960						
135 ttgattcccc ctactgggat gacatctccg actctgccaa agacttcatt cggaatctga	ı 1020						
137 tggagaaaga cccaaataaa agatacactt gtgagcaggc agctcgacac ccatggattg	, 1080						
139 ctggtgacac agcccttagc aaaaacattc acgaatctgt cagtgcccag atccggaaga	1140						
141 attttgcaaa gagcaaatgg agacaagcgt ttaacgccac ggcagtcgtg agacatatg							
143 ggaggeteca gettggeage ageetggaea gtteaaatge aagtgtetea ageaacetea							
145 gtttggccag ccaaaaagat tgtgcgtctg gcaccttcca cgctctgtag tttcctttct							
147 tettegtegg gggtegeagg atteggaget gagaggagae ecaggeecae caetgtgaea							
149 acagggcaca ctggaagcaa gtgacccggc tctggaggtg gaacccaggg ggcagggccg							
151 gggaaggaga ageceetgge eggageaget cetgeateag aaaceceace caccetgeat							
153 ggtgcacctg cataggactg gaagatagaa ggttttttat ggccatattt tatactgcaa							
155 ttctgatgtg ttcatttctc acaaactgta ctgactgact caaggggagc tggcgtcacg							
157 ggatctggtg ctgtatataa gaatcttgca aagctctaac tgaatggacc ttctagcagg							
159 tegtetegtt ceaa	1694						
162 <210> SEQ ID NO: 4							
163 <211> LENGTH: 2902							
164 <212> TYPE: DNA							
5 <213> ORGANISM: Mus musculus							
167 <400> SEQUENCE: 4							
168 cactagtgga tccaaagaat tcggcacgag gcgtgctcgg gtgcggctgt gacctctgag							
170 cccgcggctc agcgcgcgct gctactgctg cccgacccac tccacctcgc ggtccccgca							
172 ccatggagte ggtggeetta etecagegee egageeagge teeeteggee teegeeetgg	r 180						



PATENT APPLICATION: US/09/980,464

DATE: 12/21/2001 TIME: 13:14:11

Input Set : A:\2923-US Seq Listing.txt
Output Set: N:\CRF3\12212001\1980464.raw

174	cctcggagag	cgcccggccg	ctggcggacg	ggctcatcaa	gtcgcctaaa	cctctgatga	240
176	agaagcaggc	ggtgaagcgg	caccatcaca	aacacaacct	gcggcaccgc	tacgagttcc	300
178	tggagacgct	gggcaagggc	acctacggga	aggtgaagaa	ggcacgagag	agctcggggc	360
180	gtctggtggc	catcaagtcc	atcaggaaag	acaaaatcaa	agatgagcag	gatctgctgc	420
182	acatacggag	ggagattgag	atcatgtctt	cactcaacca	ccccacatc	attgccatcc	480
184	atgaagtgtt	tgagaatagc	agcaagattg	tgattgtcat	ggagtatgcc	agccgaggcg	540
186	atctgtatga	ttacatcagt	gagcggccac	ggctgagtga	gcgggacgcc	aggcatttct	600
188	tccgacagat	cgtgtctgcc	ctgcactact	gccaccagaa	cgggatcgtt	caccgagatc	660
190	tcaagctgga	aaacatcctt	ctagatgcca	atggaaacat	caagattgct	gactttggcc	720
192	tctccaacct	gtaccacaaa	ggcaagttcc	tccagacgtt	ctgtgggagc	cctctctacg	780
194	cctcgcctga	gatagtcaac	gggaagccct	atgtgggccc	agaggtggac	agctggtctc	840
					ctttgacggg		900
198	aaacactggt	gaagcaaatc	agtaacgggg	cttaccgtga	gccgcccaag	ccgtccgatg	960
200	cctgtggcct	gatccggtgg	ctgttaatgg	tgaaccccac	ccgtcgggcc	acactggagg	1020
202	atgtagccag	tcattggtgg	gtcaactggg	gttacaccac	cggagtcggg	gaacaggaag	1080
					ggcctccatg		1140
206	tacgtcgctc	ctcgcgcccc	ctcctggaga	atggagccaa	ggtgtgcagc	ttcttcaagc	1200
					gcggcaacat		1260
					tgacccggct		1320
					cattctcaag		1380
					cagaccggtg		1440
216	cagggcagcc	tgtccctgct	gtatccctgc	tcccaaggaa	aggcatcctt	aagaagtctc	1500
					cgagtctggg		1560
					gaagtctcca		1620
					caagttctcc	-	1680
					actggcctcc	_	1740
					cagcatcctg		1800
					cccactgagg		1860
					aggtctgaag		1920
					ccaagaggtg		1980
					aagggagatg		2040
236					tcggattcct		2100
238					tgaaagatga		2160
					ttatagtggg		2220
242				_	tttcccaccc		2280
				_	ggttagaacc	_	2340
					acagcctctg	_	2400
		-			gctgtttgac		2460
					acttgaacct		2520
					caacgggacc		2580
					ggtttttgtt		2640
					aatgctgtgt		2700
					gcaatgatgt		2760
					ctgtctggat		2820
	_			cctcatcttc	atctgtggcc	aaaaaaaaa	2880
		aaaaaaaaa	aa				2902
267	<210> SEQ I	ID NO: 5					

267 <210> SEQ ID NO: 5 268 <211> LENGTH: 3228

269 <212> TYPE: DNA

RAW SEQUENCE LISTING

270 <213> ORGANISM: Mus musculus

DATE: 12/21/2001 PATENT APPLICATION: US/09/980,464 TIME: 13:14:11

Input Set : A:\2923-US Seq Listing.txt Output Set: N:\CRF3\12212001\1980464.raw

272 <400> SEQUENCE: 5 60 273 tggatccaaa gaattcggca cgaggcggag tcccgcctcg ccgcccctcg agcgccccca 275 gettetetge tggeeggaac etgeaceeeg aaceaggaag cacetggegg egggegggg 120 180 277 atggctgggc ccagctgggg tctccctcgg ctggacggtt tcatccttac cgagcgcctg 279 ggcagtggca cgtacgccac ggtgtacaag gcctacgcca agaaggatac tcgggaagtg 240 281 gtagccataa aatgcgtggc caagaagagt ctcaacaagg cgtcagtgga aaacctcctg 300 360 283 actgagattg agatecteaa gggeattegg cacececata tegtgeaget gaaagaette 285 cagtgggaca atgacaatat ctacctcatc atggagttct gtgcaggggg tgacctgtct 420 287 cgcttcattc atacccgcag gatcctgcct gagaaggtgg cccgtgtttt catgcagcag 480 289 ttggctagtg ccctgcaqtt cctgcatgaa cgaaacatct ctcacttgga tctgaaaccg 540 291 cagaacatcc tgctgagctc tttggagaag ccccacctga aactggcaga ctttggcttt 600 293 gcccagcaca tgtccccgtg ggacgaaaaa cacgtgctcc gtggctcccc gctctatatg 660 295 gctcctqaqa tqqtqtcq qcqqcaqtat gatgcgcgtg tggacctctg gtctgtgggg 720 297 gtgatcctgt acgaageeet etttgggeag ecceetttg ecteeagate gtteteagag 780 299 ctaqaaqaaa aqattcqcaq caatcqqqtq attqaqqtqc qtctqqcaqq qtctaqqcat 840 301 ccaccqqqqa ttqaqqqact caaqqcccaq aaqtttqttc agcactqcaq tqcaqqctct 900 303 gggcgtttca tggcagtggg gcatgttctg tggtggaagc ctagagtctg gtccgttcct 960 305 gaggatecat ateagecaeg acaggeaaca aatgaceagg eccaatette ecatagteeg 1020 307 gggctggagg caaataccca tttgatagga gactgataaa ggatgcttgg ctctcttcct 1080 309 gcacatcacc gggacttgcc atgatccact cagattaccc acagcaaaca cgtaccctta 1140 311 tgggggttcc taacaggcct tgggctttgg gctcagatgt tggagccttc tgtgatgtgt 1200 313 ctctgctcta tgcctctgta gctccctctt cggccccaac tctccctaga ctgccgggac 1260 315 ctgttgcage gaettetaga gegggaeeee geeegtegaa teteetteaa ggaettettt 1320 317 gcccatccct gggtggacct ggagcacatg cccagtgggg agagcctggc acaggcaagg 1380 319 gcccttgtgg tggaggctgt gaagaaggac caggaggggg atgctgccgc tgccctgtcg 1440 321 ctctactgca aggctctgga cttctttgta cctgcgctac actgtgagaa ccaggccatt 1500 323 cctataacct gtgtgcagag gggggcagga gttgggtcag gctccccatt cagagcttag 1560 325 gggagatggt gcagaagatc aacgtggaac tgagtatctg aagattgcaa agggcttact 1620 327 gtqqqqtaqq ctttcaqqac aqcatcctca tatqaaccct tcaccttctq caqacqaaqt 1680 329 qqatqcccaq aqqaaqqaqq caattaaqqc qaaqqtqqqa caqtatqtqt cccqqqcaqa 1740 331 ggageteaaa gecattgtet eeteeteeaa teaggeeetg etaagaeagg geacaactgt 1800 333 ccaagagetg ettegagget geteecteae catgageett tacteteaea teagagatgg 1860 335 cccgtgacaa accacgcete etggetgeee tggaagtgge etcagetgee etggeeaagg 1920 337 aggaggaage tggcaaagag caggatgeee tggacetgta ccagcacage eteggggage 1980 339 tqctaqtqct qttqqcaqca qaqqccccaq qccqaaqqcq qqaqctcctt cacaccqaqq 2040 341 ttcagaacct catggctcga gctgaatacc tgaaggagca gatcaagata agggagtctc 2100 343 actgggaagc ggagagtctg gacaaagagg ggctgtcgga gtctgttcgt agttcttgca 2160 345 cactgcagtg acaccggaag gagcagcgga tggagcacaa ccctagagag aagctgcatt 2220 347 accaactcag gttgacacct gcacacctgg gaccttcctg gacgagcagc tcccacatgc 2280 349 tggttcccag cattcctctg agtgttctcc acccttgggg cgtctggtgg caggtgtact 2340 351 aagetetggg agaattaett gaatgtgace ttgteattag gtgaetgetg gtetaageet 2400 353 gtccggcttc aggacaccat caccccgttg tgttttgttc tgcaaagagg acgtcatgcc 2460 355 tetteaggae acttgetace agacagetge tgtacetggg ceaecectee etgggageet 2520 357 ttattccaac cctacttttt ttcttgcact ggaatgggac actcggatac cctcagggac 2580 359 tacctacctq acaqtatqct ctcqqctctc agacctctcc agtcttcctq cqaqctcaga 2640 361 gctgccatcc ttttcagttc tttaagacaa tccttcatgc atgaaagtca tgccctttgt 2700 363 aaaggtggaa tacatgtgag aaccccagac cttccctgcc ttggcatgga ggaggggtcc 2760 365 teatacecee aettacaget etetttgagg ggatatgeea caetagteae atggtggace 2820

RAW SEQUENCE LISTING

DATE: 12/21/2001 PATENT APPLICATION: US/09/980,464 TIME: 13:14:11

Input Set : A:\2923-US Seq Listing.txt
Output Set: N:\CRF3\12212001\I980464.raw

367	ctgagctaga gctgggtctt	ggctgggtct	tcccctctgt	cctattaagc	tatggataca	2880
369	tccacagctt ataccctgta	tgagctggag	aagaacttac	gtatctggag	ttactggaag	2940
371	attgctcttt ttttttttt	tctttaaaca	cccctcccc	caggtcatca	tcttgtttca	3000
373	gatttttatt caaattctta	ttgaaggctg	atttttgaat	aaggagcaga	ggagctgttc	3060
	tgccacaaat gacccccaaa		_			3120
	ttccttcctt ccttccttcc					3180
	tttctttctt tctttcttc					3228
382	<210> SEQ ID NO: 6					
	<211> LENGTH: 1035					
	<212> TYPE: DNA					
	<213> ORGANISM: Homo	sapiens				
	<400> SEQUENCE: 6	<u>-</u>				
	cgcatgagga cgcgagtgaa	atagaccaag	gtggaatttc	саадддаааа	acttcaaaat	60
	ggttttggtc catttctcca					120
	cctggatgaa atagatctct					180
	acttgttgga aatggaacat					240
	gcttgcagcc atcaaggtta			-		300
	aattaacatg ttgaagaaat					360
				-		
	tatcaaaaag aacccaccag					420 480
	tgctggctct gtcaccgacc					
	gattgcatac atctgcaggg					540
	gattcatcga gatattaaag				-	600
	agtggacttt ggagtcagtg					660
	tggaactccc tactggatgg					720
	atatgatttc aagagtgact					780
	tgctcccct ctctgtgaca	_				840
	agcgcctcgg ctgaagtcta					900
	gcttggtaaa gaatcacagc					960
	tacgagacca acctaatgag	cgacaggtcc	gcattcaact	caaggaccat	attgatagaa	1020
	caaagaagaa gcgag					1035
425	<210> SEQ ID NO: 7					
426	<211> LENGTH: 4083					
427	<212> TYPE: DNA	•				
428	<213> ORGANISM: Homo s	sapiens	•			
430	<400> SEQUENCE: 7	•		•		
431	atggcgagcg actccccggc	tcgaagcctg	gatgaaatag	atctctcggc	tctgagggac	60
433	cctgcaggga tctttgaatt	ggtggaactt	gttggaaatg	gaacatacgg	gcaagtttat	120
435	aagggtcgtc atgtcaaaac	gggccagctt	gcagccatca	aggttatgga	tgtcacaggg	180
437	gatgaagagg aagaaatcaa	acaagaaatt	aacatgttga	agaaatattc	tcatcaccgg	240
439	aatattgcta catactatgg	tgcttttatc	aaaaagaacc	caccaggcat	ggatgaccaa	300
	ctttggttgg tgatggagtt	_	-			360
	aaaggtaaca cgttgaaaga					420
	ctgagtcacc tgcaccagca		-			480
	ctgactgaaa atgcagaagt					540
	acagtgggca ggaggaatac					600
	gcctgtgatg aaaacccaga					660
	atcaccqcca ttqaaatqqc					720
	gctctcttcc tcatccccg					780
	aaattccagt catttattga					840
,	and cooling concerned the	,	5 caaagaace		Locayouaca	240

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/980,464

DATE: 12/21/2001 TIME: 13:14:12

Input Set : A:\2923-US Seq Listing.txt
Output Set: N:\CRF3\12212001\1980464.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date